

United States Mint, Philadelphia, Penn.,
ENGRAVER'S DEPARTMENT,

5th April . 18⁵⁶

Sir

In answer to the letter of the Messrs. Lyon, I beg to say, we have long been familiar with the plan by which the reducing Machine could be altered and made to do precisely what is now recommended by them, and in fact our old reducing machine possesses all that is now claimed for the alteration and has been used by us and others a great many years. As we thoroughly understand the principle of this particular movement by which the relief of a model may be increased or decreased we are consequently ready any moment, and at a trifling expense to make the alteration. It may occur to you, why have we not made this change in the machine, my

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Answer is, we do not value it, and I think
I can prove I am right. You will observe
in the specimens of work sent, there is this
marked difference, viz In the case where the
relief of the head has been decreased the work
is blind and indistinct, whereas the head with
increased relief the work is coarse compara-
tively, thus showing that one model is not
calculated to make different reductions from
with increased or decreased relief.

If it is desired to increase the relief, it is
necessary to make such allowance in the
model by keeping all detail correspondingly
fine and subduced and if a decreasing of
relief is anticipated the model must be strong
and coarse, therefore the question arises if all

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These points have to be taken into consideration why not give the model proper thought and make it what is needed. "Now that you are right then go ahead", What I have said applies especially to medals, so far as coins are concerned, I consider the alteration utterly useless, The relief of a coin is so very slight that if one portion of the design was too high in relief and the change of relief was made by the machine, that that was right before would then be too low, as the difference between too much and too little relief on a coin is very small and occurs on some special points which points have to be changed to suit the rest of the work, and for this operation the alteration to the machine is useless,

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Not
I have never had any difficulty in engraving
coining dies, the new five cent nickel dies went
into the press, also the dies for the Hawaiian
coinage and those of Bolivia all filled the
requirement of coining dies from the start with-
out any change, I therefore am obliged to
come back to the point, make the model what
is required, and there is no need of change
of relief, I think it well to mention that
we have made alterations in the reducing
machine which I think more valuable than
this of the Messrs. Iyon, by the way as you
know make a good copy of any medal
in steel without change of size or relief,
this has proved very useful with some of our
old medals where the dies were lost, or are

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the case of some of the early medals where the dies never came to this country, the method of holding the die on the machine, also an attachment to the drill by which we can produce a much finer reduction and with less trouble are all improvements which make me feel I much prefer the machine we have to any new one, and one machine can do the work of half a dozen mints if necessary.

If at any time you desire the alteration to the machine to be made I can make it on the principle of our old machine and at a small expense.,

The piece of die steel I have given immediate attention and am preparing dies therefore, though I must confess I do not hope to surpass

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what we are doing with our dies,
I have within the last three months been
visited by the representatives of two English
steel manufacturers viz, Allen & Co and
Seebohm & Dieckstahl each urging their
special claims for superior steel, but upon
showing them the Comptal report which gives
the average coinage of our dies, they both
confessed they could not hope to exceed
the durability of our dies and their prices
were in each case much higher than we now
pay for steel. Mr Allen was so much
surprised that he copied much of the Comptal
report to show his firm in England the
excellent results we are having.
As soon as the steel has been tried I will

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report the result.

I am very respectfully
Your obedient Servt
Chas. E. Barber
Engraver

Hon. A. Loudon, Snowden
Superintendent,

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U.S. Mint
Philadelphia
April 5/84

Chas. S. Barber

Adverse Report on
Wyon's 3 reductions
made in thin brass -
referring machine.
Have made better
improvements our-
selves.

(See A. Dik's Letter)
April 3, 1884.)

Rec'd
April 5/84.



[Abstract:] Adverse Report on Wyon's 3 reductions made on their transferring machine...

United States Mint, Philadelphia, Penn.,
Engraver's Department,
April 5, 1884

Sir

In answer to the letter of the Messrs. Wyon, I beg to say, we have long been familiar with the plan by which the reducing Machine could be altered and made to do precisely what is now recommended by them, and in fact our old reducing machine passes all that is now claimed for the alteration and has been used by us and others a great many years. As we thoroughly understand the principle of this particular movement by which the relief of a model may be increased or decreased we are consequently ready any moment, and at a trifling expense to make the alteration. It may occur to you, why have we not made this change in the machine, my answer is, we do not value it, and I think I can prove I am right. You will observe in the specimens of work sent, there is this marked difference, viz In the case where the relief of the head has been decreased the work is blind and indistinct, whereas the head with increased relief the work is coarse comparatively, thus showing that one model is not calculated to make different reductions from with increased or decreased relief.

If it is desired to increase the relief, it is necessary to make such allowance in the model by keeping all detail correspondingly fine and subdued and if a decreasing of relief is anticipated the model must be strong and coarse. Therefore the question arises if all these points have to be taken into consideration why not give the model proper thought and make it what is needed, "Know that you are right then go ahead". What I have said applies especially to medals, so far as coins are concerned, I consider the alteration utterly useless. The relief of a coin is so very slight that if one portion of the design was too high in relief and the change of relief was made by the machine, that there was right before would then be too low, as the difference between too much and too little relief on a coin is very small and occurs on some special point which points have to be changed to suit the rest of the work, and for this operation the alteration to the machine is useless.

I have never had any difficulty in engraving coining dies, the new five cent nickel dies went into the press also the dies for the Hawaiian coinage and those of Bolivia all filled the requirements of coining dies from the start without any change, I therefore am obliged to come back to the point, make the model what is required, and there is no need of change of relief. I think it well to mention that we have made alterations in the reducing machine which I think more valuable than this of the Messrs. Wyon, viz. the coin as you know make a good copy of any medal in steel without change of size or relief, this has proved very useful with some of our old medals where the dies were last, or as in the case of some of the early medals where the dies never came to this country the method of holding the die on the machine, also an attachment to the drill by which we can produce a much finer reduction and without less trouble are all improvements which make me feel I much prefer the machine we have to any new one, and one machine can do the work of half a dozen Mints of necessary.

If at any time you desire the alteration to the Machine to be made I can make it on the principle of our old machine and at a small expense.

The piece of die steel I have given immediate attention and am preparing dies therefrom, though I must confess I do not hope to surpass what we are doing with our dies.

I have within the last three months been visited by the representatives of two English steel manufacturers viz Allen & Co. and Seebohm & Dieckstake each urging their special claims for superior steel, but upon showing them the coiner report which give the average coinage of our dies, they both confessed they could not hope to exceed the durability of our dies and their pieces were in each case much higher than we now pay for steel Mr. Allen was so much surprised that he copied much of the coiners report to show his firm in England the excellent results we are having.

As soon as the steel has been tried I will report the result.

I am very respectfully
Your obedient servant
Chas. E. Barber
Engraver

Hon. A. Loudon Snowden
Superintendent.

[Noted on back:]

(See A.D.M.'s Letter April 3, 1884.)